CLAIMS

What is claimed is:

1. A multichannel wavelength measurement device comprising:

multiple optical detectors, each detector adapted to detect light at a different

wavelength; and

a sequence of optical wavelength splitters in an optical path, each of the optical

splitters adapted to preferentially provide light to one of the detectors at the desired detected

wavelength of the detector.

2. The multichannel wavelength measurement device of claim 1, wherein the optical

splitters are pass filters.

3. The multichannel wavelength measurement device of claim 2, wherein at least one of

the pass filters is a high pass filter.

4. The multichannel wavelength measurement device of claim 2, wherein at least one of

the pass filters is a low pass filter.

5. The multichannel wavelength measurement device of claim 1, wherein a first detector

receives light provided by a first optical splitter, the first optical splitter preferably providing

light at a second wavelength to a second optical splitter which preferably provides the light at

the second wavelength to a second optical detector.

6. The method of claim 5, wherein the optical splitters are optical pass filters.

7. The multichannel wavelength measurement devices of claim 1, wherein the

multichannel wavelength measurement device is used to determine characteristics of paper.

8. The multichannel wavelength measurement device of claim 1, wherein the

preferential providing of light for one of the optical splitters is done by preferentially

reflecting light at the wavelength.

9. The multichannel wavelength measurement device of claim 1, wherein the preferentially providing of light at the wavelength is done by preferentially transmitting light at the wavelength.

10. A method comprising:

using optical splitters to preferentially provide light from an optical path to detectors at desired detected wavelengths of the detector; and

using the detectors to detect light at the desired detected wavelength.

- 11. The method of claim 10, wherein the optical splitter is an optical pass filter.
- 12. The method of claim 11, wherein the optical pass filter is an optical high pass filter.
- 13. The method of claim 11, wherein the optical pass filter is an optical low pass filter.
- 14. The method of claim 8, wherein the first optical splitter preferentially provides light at a first wavelength to a first detector and preferentially provides a light at a second wavelength to a second optical splitter, the second optical splitter preferentially providing light at the second wavelength to a second detector.
- 15. The method of claim 14, wherein the first and second optical splitters are optical pass filters.
- 16. The method of claim 8, wherein the method is used to determine characteristics of paper.
- 17. The method of claim 8, wherein the preferentially providing of light at the wavelength by one of the optical splitters is done by preferentially reflecting light.
- 18. The method of claim 10, wherein the preferentially providing of light at the wavelength by one of the optical splitters is done by preferentially transmitting light.

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